

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
SEQUENCE LISTING

<110> KUMAR, Chandrika S.

<120> METHODS AND COMPOSITIONS TARGETING TYROSINE KINASES

<130> 3491/OM582US0

<140> To be assigned

<141> Herewith

<160> 35

<170> PatentIn version 3.2

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<212> DNA

<213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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<213> Homo sapiens

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Leu Leu Leu Pro Glu Ser Ala Ala Ala Gly Leu Lys Leu Met Gly Ala
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Pro Val Lys Leu Thr Val Ser Gln Gly Gln Pro Val Lys Leu Asn Cys
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Ser Val Glu Gly Met Glu Glu Pro Asp Ile Gln Trp Val Lys Asp Gly
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Ala Val Val Gln Asn Leu Asp Gln Leu Tyr Ile Pro Val Ser Glu Gln
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His Trp Ile Gly Phe Leu Ser Leu Lys Ser Val Glu Arg Ser Asp Ala
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Gly Arg Tyr Trp Cys Gln Val Glu Asp Gly Gly Glu Thr Glu Ile Ser
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Gln Pro Val Trp Leu Thr Val Glu Gly Val Pro Phe Phe Thr Val Glu
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Pro Lys Asp Leu Ala Val Pro Pro Asn Ala Pro Phe Gln Leu Ser Cys
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 210 215 220
 Pro Ala Ala Pro Phe Asn Ile Thr Val Thr Lys Leu Ser Ser Ser Asn
 225 230 235 240
 Ala Ser Val Ala Trp Met Pro Gly Ala Asp Gly Arg Ala Leu Leu Gln
 245 250 255
 Ser Cys Thr Val Gln Val Thr Gln Ala Pro Gly Gly Trp Glu Val Leu
 260 265 270
 Ala Val Val Val Pro Val Pro Pro Phe Thr Cys Leu Leu Arg Asp Leu
 275 280 285
 Val Pro Ala Thr Asn Tyr Ser Leu Arg Val Arg Cys Ala Asn Ala Leu
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 Gly Pro Ser Pro Tyr Ala Asp Trp Val Pro Phe Gln Thr Lys Gly Leu
 305 310 315 320
 Ala Pro Ala Ser Ala Pro Gln Asn Leu His Ala Ile Arg Thr Asp Ser
 325 330 335
 Gly Leu Ile Leu Glu Trp Glu Glu Val Ile Pro Glu Ala Pro Leu Glu
 340 345 350
 Gly Pro Leu Gly Pro Tyr Lys Leu Ser Trp Val Gln Asp Asn Gly Thr
 355 360 365
 Gln Asp Glu Leu Thr Val Glu Gly Thr Arg Ala Asn Leu Thr Gly Trp
 370 375 380
 Asp Pro Gln Lys Asp Leu Ile Val Arg Val Cys Val Ser Asn Ala Val
 385 390 395 400
 Gly Cys Gly Pro Trp Ser Gln Pro Leu Val Val Ser Ser His Asp Arg
 405 410 415
 Ala Gly Gln Gln Gly Pro Pro His Ser Arg Thr Ser Trp Val Pro Val
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Arg Ser Phe Asn Arg Glu Arg Pro Glu Arg Ile Glu Ala Thr Leu Asp
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Ser Leu Gly Ile Ser Asp Glu Leu Lys Glu Lys Leu Glu Asp Val Leu
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Ile Pro Glu Gln Gln Phe Thr Leu Gly Arg Met Leu Gly Lys Gly Glu
515                               520                               525

Phe Gly Ser Val Arg Glu Ala Gln Leu Lys Gln Glu Asp Gly Ser Phe
530                               535                               540

Val Lys Val Ala Val Lys Met Leu Lys Ala Asp Ile Ile Ala Ser Ser
545                               550                               555                               560

Asp Ile Glu Glu Phe Leu Arg Glu Ala Ala Cys Met Lys Glu Phe Asp
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His Pro His Val Ala Lys Leu Val Gly Val Ser Leu Arg Ser Arg Ala
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Lys Gly Arg Leu Pro Ile Pro Met Val Ile Leu Pro Phe Met Lys His
595                               600                               605

Gly Asp Leu His Ala Phe Leu Leu Ala Ser Arg Ile Gly Glu Asn Pro
610                               615                               620

Phe Asn Leu Pro Leu Gln Thr Leu Ile Arg Phe Met Val Asp Ile Ala
625                               630                               635                               640

Cys Gly Met Glu Tyr Leu Ser Ser Arg Asn Phe Ile His Arg Asp Leu
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Ala Ala Arg Asn Cys Met Leu Ala Glu Asp Met Thr Val Cys Val Ala
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Gly Cys Ala Ser Lys Leu Pro Val Lys Trp Leu Ala Leu Glu Ser Leu
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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740 745 750

Gln Pro Pro Glu Cys Met Glu Asp Val Tyr Asp Leu Met Tyr Gln Cys
755 760 765

Trp Ser Ala Asp Pro Lys Gln Arg Pro Ser Phe Thr Cys Leu Arg Met
770 775 780

Glu Leu Glu Asn Ile Leu Gly Gln Leu Ser Val Leu Ser Ala Ser Gln
785 790 795 800

Asp Pro Leu Tyr Ile Asn Ile Glu Arg Ala Glu Glu Pro Thr Ala Gly
805 810 815

Gly Ser Leu Glu Leu Pro Gly Arg Asp Gln Pro Tyr Ser Gly Ala Gly
820 825 830

Asp Gly Ser Gly Met Gly Ala Val Gly Gly Thr Pro Ser Asp Cys Arg
835 840 845

Tyr Ile Leu Thr Pro Gly Gly Leu Ala Glu Gln Pro Gly Gln Ala Glu
850 855 860

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Leu Pro Ala Arg Glu Ala Thr Gln Phe Leu Arg Pro Arg Gln Arg Arg
35 40 45

Ala Phe Gln Val Phe Glu Glu Ala Lys Gln Gly His Leu Glu Arg Glu
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

Cys Val Glu Glu Leu Cys Ser Arg Glu Glu Ala Arg Glu Val Phe Glu
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Asn Lys Tyr Gly Ser Pro Tyr Thr Lys Asn Ser Gly Phe Ala Thr Cys
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Val Gln Asn Leu Pro Asp Gln Cys Thr Pro Asn Pro Cys Asp Arg Lys
115 120 125

Gly Thr Gln Ala Cys Gln Asp Leu Met Gly Asn Phe Phe Cys Leu Cys
130 135 140

Lys Ala Gly Trp Gly Gly Arg Leu Cys Asp Lys Asp Val Asn Glu Cys
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Ser Gln Glu Asn Gly Gly Cys Leu Gln Ile Cys His Asn Lys Pro Gly
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180 185 190

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Glu Ala Arg Cys Lys Asn Leu Pro Gly Ser Tyr Ser Cys Leu Cys Asp
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Glu Gly Phe Ala Tyr Ser Ser Gln Glu Lys Ala Cys Arg Asp Val Asp
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Glu Cys Leu Gln Gly Arg Cys Glu Gln Val Cys Val Asn Ser Pro Gly
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Ser Tyr Thr Cys His Cys Asp Gly Arg Gly Gly Leu Lys Leu Ser Gln
260 265 270

Asp Met Asp Thr Cys Glu Asp Ile Leu Pro Cys Val Pro Phe Ser Val
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Ala Lys Ser Val Lys Ser Leu Tyr Leu Gly Arg Met Phe Ser Gly Thr
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
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 370 375 380

Glu Glu Leu Ala Arg Asn Leu Val Ile Lys Val Asn Arg Asp Ala Val
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Met Lys Ile Ala Val Ala Gly Asp Leu Phe Gln Pro Glu Arg Gly Leu
 405 410 415

Tyr His Leu Asn Leu Thr Val Gly Gly Ile Pro Phe His Glu Lys Asp
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Leu Val Gln Pro Ile Asn Pro Arg Leu Asp Gly Cys Met Arg Ser Trp
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Asn Trp Leu Asn Gly Glu Asp Thr Thr Ile Gln Glu Thr Val Lys Val
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 Leu Ser Asn Lys Lys Asp Cys Lys Asp Val Asp Glu Cys Ser Leu Lys
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 Pro Ser Ile Cys Gly Thr Ala Val Cys Lys Asn Ile Pro Gly Asp Phe
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 Glu Cys Glu Cys Pro Glu Gly Tyr Arg Tyr Asn Leu Lys Ser Lys Ser
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 Cys Glu Asp Ile Asp Glu Cys Ser Glu Asn Met Cys Ala Gln Leu Cys
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 Tyr Asn Asn Val Ser Ser Ala Glu Gly Trp His Val Asn Val Thr Leu
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<213> Homo sapiens

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Pro Glu Val His Trp Leu Arg Asp Gly Gln Ile Leu Glu Leu Ala Asp
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	100	105	110
Gly Gln Tyr	Gln Cys Leu Val Phe	Leu Gly His Gln Thr	Phe Val Ser
	115	120	125
Gln Pro Gly Tyr Val	Gly Leu Glu Gly Leu Pro	Tyr Phe Leu Glu Glu	
	130	135	140
Pro Glu Asp Arg Thr	Val Ala Ala Asn Thr	Pro Phe Asn Leu Ser	Cys
	145	150	155
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	180	185	190
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Asn Ala Lys Gly Val Thr	Thr Ser Arg Thr Ala	Thr Ile Thr Val Leu	
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	225	230	235
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	245	250	255
His Cys Thr Leu Gln Ala	Val Leu Ser Asp Asp	Gly Met Gly Ile Gln	
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Ala Gly Glu Pro Asp Pro	Pro Glu Glu Pro Leu Thr	Ser Gln Ala Ser	
	275	280	285
Val Pro Pro His Gln Leu	Arg Leu Gly Ser Leu	His Pro His Thr Pro	
	290	295	300
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Thr His Trp Leu Pro Val	Glu Thr Pro Glu Gly	Val Pro Leu Gly Pro	
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 385 390 395 400

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Trp Ser Leu Pro Val Pro Leu Glu Ala Trp Arg Pro Val Lys Glu Pro
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Ser Thr Pro Ala Phe Ser Trp Pro Trp Trp Tyr Val Leu Leu Gly Ala
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Val Val Ala Ala Ala Cys Val Leu Ile Leu Ala Leu Phe Leu Val His
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Arg Arg Lys Lys Glu Thr Arg Tyr Gly Glu Val Phe Glu Pro Thr Val
 465 470 475 480

Glu Arg Gly Glu Leu Val Val Arg Tyr Arg Val Arg Lys Ser Tyr Ser
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Lys Ile Ala Ile Cys Thr Arg Ser Glu Leu Glu Asp Phe Leu Ser Glu
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Val Ile Leu Pro Phe Met Lys His Gly Asp Leu His Ser Phe Leu Leu

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

610

615

620

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Val Lys Phe Met Ala Asp Ile Ala Ser Gly Met Glu Tyr Leu Ser Thr
645 650 655

Lys Arg Phe Ile His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Asn
660 665 670

Glu Asn Met Ser Val Cys Val Ala Asp Phe Gly Leu Ser Lys Lys Ile
675 680 685

Tyr Asn Gly Asp Tyr Tyr Arg Gln Gly Arg Ile Ala Lys Met Pro Val
690 695 700

Lys Trp Ile Ala Ile Glu Ser Leu Ala Asp Arg Val Tyr Thr Ser Lys
705 710 715 720

Ser Asp Val Trp Ser Phe Gly Val Thr Met Trp Glu Ile Ala Thr Arg
725 730 735

Gly Gln Thr Pro Tyr Pro Gly Val Glu Asn Ser Glu Ile Tyr Asp Tyr
740 745 750

Leu Arg Gln Gly Asn Arg Leu Lys Gln Pro Ala Asp Cys Leu Asp Gly
755 760 765

Leu Tyr Ala Leu Met Ser Arg Cys Trp Glu Leu Asn Pro Gln Asp Arg
770 775 780

Pro Ser Phe Thr Glu Leu Arg Glu Asp Leu Glu Asn Thr Leu Lys Ala
785 790 795 800

Leu Pro Pro Ala Gln Glu Pro Asp Glu Ile Leu Tyr Val Asn Met Asp
805 810 815

Glu Gly Gly Gly Tyr Pro Glu Pro Pro Gly Ala Ala Gly Gly Ala Asp
820 825 830

Pro Pro Thr Gln Pro Asp Pro Lys Asp Ser Cys Ser Cys Leu Thr Ala
835 840 845

Ala Glu Val His Pro Ala Gly Arg Tyr Val Leu Cys Pro Ser Thr Thr
850 855 860

Pro Ser Pro Ala Gln Pro Ala Asp Arg Gly Ser Pro Ala Ala Pro Gly
865 870 875 880

Gln Glu Asp Gly Ala

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT
885

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<211> 5014
<212> DNA
<213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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<210> 33
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<212> PRT
<213> Homo sapiens

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<400> 33
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20          25          30

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Glu Glu Ser Pro Phe Val Gly Asn Pro Gly Asn Ile Thr Gly Ala Arg
35          40          45

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Gly Leu Thr Gly Thr Leu Arg Cys Gln Leu Gln Val Gln Gly Glu Pro
50          55          60

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Pro Glu Val His Trp Leu Arg Asp Gly Gln Ile Leu Glu Leu Ala Asp
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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Ile Val Val Ser Gln Leu Arg Ile Thr Ser Leu Gln Leu Ser Asp Thr
      100                      105                      110

Gly Gln Tyr Gln Cys Leu Val Phe Leu Gly His Gln Thr Phe Val Ser
      115                      120                      125

Gln Pro Gly Tyr Val Gly Leu Glu Gly Leu Pro Tyr Phe Leu Glu Glu
      130                      135                      140

Pro Glu Asp Arg Thr Val Ala Ala Asn Thr Pro Phe Asn Leu Ser Cys
      145                      150                      155                      160

Gln Ala Gln Gly Pro Pro Glu Pro Val Asp Leu Leu Trp Leu Gln Asp
      165                      170                      175

Ala Val Pro Leu Ala Thr Ala Pro Gly His Gly Pro Gln Arg Ser Leu
      180                      185                      190

His Val Pro Gly Leu Asn Lys Thr Ser Ser Phe Ser Cys Glu Ala His
      195                      200                      205

Asn Ala Lys Gly Val Thr Thr Ser Arg Thr Ala Thr Ile Thr Val Leu
      210                      215                      220

Pro Gln Gln Pro Arg Asn Leu His Leu Val Ser Arg Gln Pro Thr Glu
      225                      230                      235                      240

Leu Glu Val Ala Trp Thr Pro Gly Leu Ser Gly Ile Tyr Pro Leu Thr
      245                      250                      255

His Cys Thr Leu Gln Ala Val Leu Ser Asp Asp Gly Met Gly Ile Gln
      260                      265                      270

Ala Gly Glu Pro Asp Pro Pro Glu Glu Pro Leu Thr Ser Gln Ala Ser
      275                      280                      285

Val Pro Pro His Gln Leu Arg Leu Gly Ser Leu His Pro His Thr Pro
      290                      295                      300

Tyr His Ile Arg Val Ala Cys Thr Ser Ser Gln Gly Pro Ser Ser Trp
      305                      310                      315                      320

Thr His Trp Leu Pro Val Glu Thr Pro Glu Gly Val Pro Leu Gly Pro
      325                      330                      335

Pro Glu Asn Ile Ser Ala Thr Arg Asn Gly Ser Gln Ala Phe Val His
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 Leu Arg Gln Glu Val Thr Leu Glu Leu Gln Gly Asp Gly Ser Val Ser
 385 390 395 400
 Asn Leu Thr Val Cys Val Ala Ala Tyr Thr Ala Ala Gly Asp Gly Pro
 405 410 415
 Trp Ser Leu Pro Val Pro Leu Glu Ala Trp Arg Pro Gly Gln Ala Gln
 420 425 430
 Pro Val His Gln Leu Val Lys Glu Pro Ser Thr Pro Ala Phe Ser Trp
 435 440 445
 Pro Trp Trp Tyr Val Leu Leu Gly Ala Val Val Ala Ala Ala Cys Val
 450 455 460
 Leu Ile Leu Ala Leu Phe Leu Val His Arg Arg Lys Lys Glu Thr Arg
 465 470 475 480
 Tyr Gly Glu Val Phe Glu Pro Thr Val Glu Arg Gly Glu Leu Val Val
 485 490 495
 Arg Tyr Arg Val Arg Lys Ser Tyr Ser Arg Arg Thr Thr Glu Ala Thr
 500 505 510
 Leu Asn Ser Leu Gly Ile Ser Glu Glu Leu Lys Glu Lys Leu Arg Asp
 515 520 525
 Val Met Val Asp Arg His Lys Val Ala Leu Gly Lys Thr Leu Gly Glu
 530 535 540
 Gly Glu Phe Gly Ala Val Met Glu Gly Gln Leu Asn Gln Asp Asp Ser
 545 550 555 560
 Ile Leu Lys Val Ala Val Lys Thr Met Lys Ile Ala Ile Cys Thr Arg
 565 570 575
 Ser Glu Leu Glu Asp Phe Leu Ser Glu Ala Val Cys Met Lys Glu Phe
 580 585 590
 Asp His Pro Asn Val Met Arg Leu Ile Gly Val Cys Phe Gln Gly Ser
 595 600 605
 Glu Arg Glu Ser Phe Pro Ala Pro Val Val Ile Leu Pro Phe Met Lys
 610 615 620

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

His Gly Asp Leu His Ser Phe Leu Leu Tyr Ser Arg Leu Gly Asp Gln
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 Pro Val Tyr Leu Pro Thr Gln Met Leu Val Lys Phe Met Ala Asp Ile
 645 650 655
 Ala Ser Gly Met Glu Tyr Leu Ser Thr Lys Arg Phe Ile His Arg Asp
 660 665 670
 Leu Ala Ala Arg Asn Cys Met Leu Asn Glu Asn Met Ser Val Cys Val
 675 680 685
 Ala Asp Phe Gly Leu Ser Lys Lys Ile Tyr Asn Gly Asp Tyr Tyr Arg
 690 695 700
 Gln Gly Arg Ile Ala Lys Met Pro Val Lys Trp Ile Ala Ile Glu Ser
 705 710 715 720
 Leu Ala Asp Arg Val Tyr Thr Ser Lys Ser Asp Val Trp Ser Phe Gly
 725 730 735
 Val Thr Met Trp Glu Ile Ala Thr Arg Gly Gln Thr Pro Tyr Pro Gly
 740 745 750
 Val Glu Asn Ser Glu Ile Tyr Asp Tyr Leu Arg Gln Gly Asn Arg Leu
 755 760 765
 Lys Gln Pro Ala Asp Cys Leu Asp Gly Leu Tyr Ala Leu Met Ser Arg
 770 775 780
 Cys Trp Glu Leu Asn Pro Gln Asp Arg Pro Ser Phe Thr Glu Leu Arg
 785 790 795 800
 Glu Asp Leu Glu Asn Thr Leu Lys Ala Leu Pro Pro Ala Gln Glu Pro
 805 810 815
 Asp Glu Ile Leu Tyr Val Asn Met Asp Glu Gly Gly Gly Tyr Pro Glu
 820 825 830
 Pro Pro Gly Ala Ala Gly Gly Ala Asp Pro Pro Thr Gln Pro Asp Pro
 835 840 845
 Lys Asp Ser Cys Ser Cys Leu Thr Ala Ala Glu Val His Pro Ala Gly
 850 855 860
 Arg Tyr Val Leu Cys Pro Ser Thr Thr Pro Ser Pro Ala Gln Pro Ala
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 Asp Arg Gly Ser Pro Ala Ala Pro Gly Gln Glu Asp Gly Ala
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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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 <211> 3608
 <212> DNA
 <213> Homo sapiens

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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<210> 35
<211> 999
<212> PRT
<213> Homo sapiens

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<400> 35

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

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35      40      45

Pro Leu Leu Ser Leu Pro His Ala Ser Gly Tyr Gln Pro Ala Leu Met
50      55      60

Phe Ser Pro Thr Gln Pro Gly Arg Pro His Thr Gly Asn Val Ala Ile
65      70      75      80

Pro Gln Val Thr Ser Val Glu Ser Lys Pro Leu Pro Pro Leu Ala Phe
85      90      95

Lys His Thr Val Gly His Ile Ile Leu Ser Glu His Lys Gly Val Lys
100     105     110

Phe Asn Cys Ser Ile Asn Val Pro Asn Ile Tyr Gln Asp Thr Thr Ile
115     120     125

Ser Trp Trp Lys Asp Gly Lys Glu Leu Leu Gly Gly His His Arg Ile
130     135     140

Thr Gln Phe Tyr Pro Asp Asp Glu Val Thr Ala Ile Ile Ala Ser Phe
145     150     155     160

Ser Ile Thr Ser Val Gln Arg Ser Asp Asn Gly Ser Tyr Ile Cys Lys
165     170     175

Met Lys Ile Asn Asn Glu Glu Ile Val Ser Asp Pro Ile Tyr Ile Glu
180     185     190

Val Gln Gly Leu Pro His Phe Thr Lys Gln Pro Glu Ser Met Asn Val
195     200     205

Thr Arg Asn Thr Ala Phe Asn Leu Thr Cys Gln Ala Val Gly Pro Pro
210     215     220

Glu Pro Val Asn Ile Phe Trp Val Gln Asn Ser Ser Arg Val Asn Glu
225     230     235     240

Gln Pro Glu Lys Ser Pro Gly Val Leu Thr Val Pro Gly Leu Thr Glu
245     250     255

Met Ala Val Phe Ser Cys Glu Ala His Asn Asp Lys Gly Leu Thr Val
260     265     270

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33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

Ser Gln Gly Val Gln Ile Asn Ile Lys Ala Ile Pro Ser Pro Pro Thr
 275 280 285
 Glu Val Ser Ile Arg Asn Ser Thr Ala His Ser Ile Leu Ile Ser Trp
 290 295 300
 Val Pro Gly Phe Asp Gly Tyr Ser Pro Phe Arg Asn Cys Ser Ile Gln
 305 310 315 320
 Val Lys Glu Ala Asp Pro Leu Gly Asn Gly Ser Val Met Ile Phe Asn
 325 330 335
 Thr Ser Ala Leu Pro His Leu Tyr Gln Ile Lys Gln Leu Gln Ala Leu
 340 345 350
 Ala Asn Tyr Ser Ile Gly Val Ser Cys Met Asn Glu Ile Gly Trp Ser
 355 360 365
 Ala Val Ser Pro Trp Ile Leu Ala Ser Thr Thr Glu Gly Ala Pro Ser
 370 375 380
 Val Ala Pro Leu Asn Val Thr Val Phe Leu Asn Glu Ser Ser Asp Asn
 385 390 395 400
 Val Asp Ile Arg Trp Met Lys Pro Pro Thr Lys Gln Gln Asp Gly Glu
 405 410 415
 Leu Val Gly Tyr Arg Ile Ser His Val Trp Gln Ser Ala Gly Ile Ser
 420 425 430
 Lys Glu Leu Leu Glu Glu Val Gly Gln Asn Gly Ser Arg Ala Arg Ile
 435 440 445
 Ser Val Gln Val His Asn Ala Thr Cys Thr Val Arg Ile Ala Ala Val
 450 455 460
 Thr Arg Gly Gly Val Gly Pro Phe Ser Asp Pro Val Lys Ile Phe Ile
 465 470 475 480
 Pro Ala His Gly Trp Val Asp Tyr Ala Pro Ser Ser Thr Pro Ala Pro
 485 490 495
 Gly Asn Ala Asp Pro Val Leu Ile Ile Phe Gly Cys Phe Cys Gly Phe
 500 505 510
 Ile Leu Ile Gly Leu Ile Leu Tyr Ile Ser Leu Ala Ile Arg Lys Arg
 515 520 525
 Val Gln Glu Thr Lys Phe Gly Asn Ala Phe Thr Glu Glu Asp Ser Glu
 530 535 540

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

Leu Val Val Asn Tyr Ile Ala Lys Lys Ser Phe Cys Arg Arg Ala Ile
 545 550 555 560
 Glu Leu Thr Leu His Ser Leu Gly Val Ser Glu Glu Leu Gln Asn Lys
 565 570 575
 Leu Glu Asp Val Val Ile Asp Arg Asn Leu Leu Ile Leu Gly Lys Ile
 580 585 590
 Leu Gly Glu Gly Glu Phe Gly Ser Val Met Glu Gly Asn Leu Lys Gln
 595 600 605
 Glu Asp Gly Thr Ser Leu Lys Val Ala Val Lys Thr Met Lys Leu Asp
 610 615 620
 Asn Ser Ser His Arg Glu Ile Glu Glu Phe Leu Ser Glu Ala Ala Cys
 625 630 635 640
 Met Lys Asp Phe Ser His Pro Asn Val Ile Arg Leu Leu Gly Val Cys
 645 650 655
 Ile Glu Met Ser Ser Gln Gly Ile Pro Lys Pro Met Val Ile Leu Pro
 660 665 670
 Phe Met Lys Tyr Gly Asp Leu His Thr Tyr Leu Leu Tyr Ser Arg Leu
 675 680 685
 Glu Thr Gly Pro Lys His Ile Pro Leu Gln Thr Leu Leu Lys Phe Met
 690 695 700
 Val Asp Ile Ala Leu Gly Met Glu Tyr Leu Ser Asn Arg Asn Phe Leu
 705 710 715 720
 His Arg Asp Leu Ala Ala Arg Asn Cys Met Leu Arg Asp Asp Met Thr
 725 730 735
 Val Cys Val Ala Asp Phe Gly Leu Ser Lys Lys Ile Tyr Ser Gly Asp
 740 745 750
 Tyr Tyr Arg Gln Gly Arg Ile Ala Lys Met Pro Val Lys Trp Ile Ala
 755 760 765
 Ile Glu Ser Leu Ala Asp Arg Val Tyr Thr Ser Lys Ser Asp Val Trp
 770 775 780
 Ala Phe Gly Val Thr Met Trp Glu Ile Arg Thr Arg Gly Met Thr Pro
 785 790 795 800
 Tyr Pro Gly Val Gln Asn His Glu Met Tyr Asp Tyr Leu Leu His Gly
 805 810 815

33157_SEQUENCE LISTING (ASCII TEXT) (SSW1915).TXT

His Arg Leu Lys Gln Pro Glu Asp Cys Leu Asp Glu Leu Tyr Glu Ile
 820 825 830

Met Tyr Ser Cys Trp Arg Thr Asp Pro Leu Asp Arg Pro Thr Phe Ser
 835 840 845

Val Leu Arg Leu Gln Leu Glu Lys Leu Leu Glu Ser Leu Pro Asp Val
 850 855 860

Arg Asn Gln Ala Asp Val Ile Tyr Val Asn Thr Gln Leu Leu Glu Ser
 865 870 875 880

Ser Glu Gly Leu Ala Gln Gly Pro Thr Leu Ala Pro Leu Asp Leu Asn
 885 890 895

Ile Asp Pro Asp Ser Ile Ile Ala Ser Cys Thr Pro Arg Ala Ala Ile
 900 905 910

Ser Val Val Thr Ala Glu Val His Asp Ser Lys Pro His Glu Gly Arg
 915 920 925

Tyr Ile Leu Asn Gly Gly Ser Glu Glu Trp Glu Asp Leu Thr Ser Ala
 930 935 940

Pro Ser Ala Ala Val Thr Ala Glu Lys Asn Ser Val Leu Pro Gly Glu
 945 950 955 960

Arg Leu Val Arg Asn Gly Val Ser Trp Ser His Ser Ser Met Leu Pro
 965 970 975

Leu Gly Ser Ser Leu Pro Asp Glu Leu Leu Phe Ala Asp Asp Ser Ser
 980 985 990

Glu Gly Ser Glu Val Leu Met
 995